degrees Kelvin. In an embodiment, an API gravity of the produced mixture may be controlled to be greater than about 25°, 30°, or 35° API by controlling average pressure and average temperature in the part of the formation such that the average pressure in the part of the formation is greater than p for an assessed average temperature T in the part of the formation when A = -44,000 and B = 67, A = -31,000 and B = 51, or A = -22,000 and B = 38, respectively. In an embodiment, a weight percentage of olefins in the produced mixture may be controlled to be less than about 20 % by weight, less than about 10 % by weight, or less than about 5 % by weight by controlling average pressure and average temperature in the part of the formation such that the average pressure in the part of the formation is greater than p for an assessed average temperature T in the part of the formation when A = -57,000 and B = 83, A = -16,000 and B = 28, or A = -12,000 and B = 22, respectively. In an embodiment, hydrocarbons having carbon numbers greater than 25 in the produced mixture may be controlled to be less than about 25 % by weight, less than about 20 % by weight, or less than about 15 % by weight by controlling average pressure and average temperature in the part of the formation such that the average pressure in the part of the formation is greater than p for an assessed average temperature T in the part of the formation when A = -14,000 and B = 25, A = -16,000 and B = 28, or A = -18,000 and B = 32, respectively. In an embodiment, an atomic hydrogen to carbon ratio in the produced mixture may be controlled to be greater than about 1.7, greater than about 1.8, or greater than about 1.9 by controlling average pressure and average temperature in the part of the formation such that the average pressure in the part of the formation is greater than p for an assessed average temperature T in the part of the formation when A = -38,000 and B = 61, A = -13,000 and B = 24, or A = -8,000 and B = 18, respectively. Alternatively, an average absolute pressure of the selected section, measured in bars, may be determined using the following relationship: $p_{bars} = \exp[(A/T) + B - 2.6744]$. In this manner, an average pressure within the selected section may be controlled such that an average pressure within the selected section is adjusted to the average pressure as determined above, in order to produce a formation fluid from the selected section having a selected property.